



I-81 Corridor Improvement Project

Initial Review Committee Meeting

2 October 2003

A faster way to a safer I-81 at a reasonable cost

FLUOR[®]

presentation agenda

- Introductions
- Project Description
- Implementation
- Finance Plan
- Summary
- Q&A

Herb Morgan

Herb Morgan

Michael Hatchell

Jim Taylor

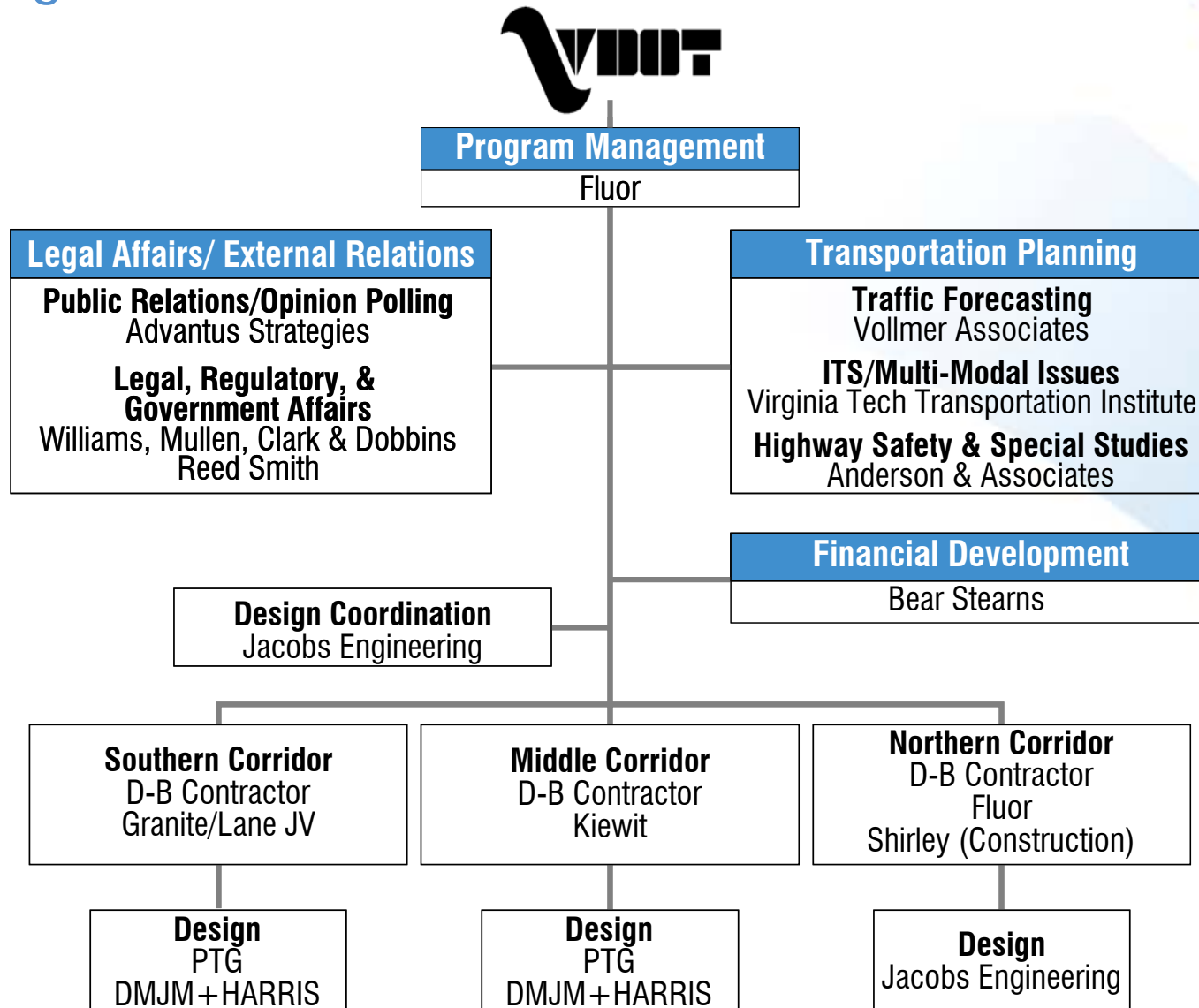
Herb Morgan

Herb Morgan

the Fluor team

- Advantus Strategies
- Anderson & Associates, Inc.
- Bear Stearns
- DMJM + HARRIS
- Granite Construction Company
- Jacobs Engineering
- Land Planning and Design Associates, Inc.
- The Lane Construction Corporation
- O.R. Colan & Associates, Inc.
- Parsons Transportation Group, Inc. of Virginia (PTG)
- Peter Kiewit Sons' Inc.
- Raytheon Corporation
- Reed Smith, LLP
- Shirley Contracting Company
- Virginia Tech Transportation Institute
- VMS, Inc.
- Vollmer Associates, LLP
- Williams, Mullen, Clark & Dobbins

organization chart



best of the best



- Largest PPTA road contract in history requires the **“Best of the Best”**
- Deliberate attention taken to identify the **“right”** team
- Assemble the most experienced, financially stable road builders in the country along with the best local designers and contractors from Virginia



The Top Design-Build Firms *July 2002 Issue*

- 2 Fluor
- 3 Jacobs
- 8 Peter Kiewit Sons', Inc.

The Top Design Firms *July 2002 Issue*

- 3 Jacobs
- 4 AECOM
- 5 Fluor
- 7 Parsons

The Top Transportation Firms *September 2002 Issue*

- 1 Peter Kiewit Sons', Inc.
- 3 Granite
- 9 Lane
- 15 The Clark Construction Group
- 16 Fluor

best of the best contractors



- Team consists of the 3 most successful Design-Builders in North America
 - Fluor
 - Granite
 - Kiewit
- And the most experienced design-build contractors in Virginia
 - Shirley Contracting Corporation – Lorton, VA
 - The Lane Construction Corporation – Chantilly, VA
- Combined, perform **\$20 billion** in construction/year

best of the best designers



- Our local designers include:
 - Jacobs - Arlington, VA
 - Parsons Transportations Group (PTG) - Fairfax, VA
 - DMJM + HARRIS - Richmond, VA
 - Anderson & Associates - Blacksburg, VA
- Perform more than **\$4 billion** in design work/year
- Experienced with the I-81 corridor and VDOT procedures

best of the best

maintenance



- VMS, a Richmond-based firm, is a leader in asset management in the United States
- Signed first PPTA contract in Virginia
- Currently maintaining I-81 in Salem
- Teamed with Fluor on SH-130 project in Texas



best of the
best

Fluor has assembled
the best team to
address the long-term
challenges on I-81



the challenges on I-81



- Safety
 - High accident rates with many fatalities
 - Accidents caused by combination of:
 - ◆ High traffic volume
 - ◆ High percentage of trucks
 - ◆ Rolling terrain
- Growing congestion
 - Volume is more than 50% of capacity
 - Volume is growing faster than population

safety solution

- Add one “car-only” lane in each direction because of demonstrated benefit
- Expand into median to minimize right-of-way and environmental impacts
- Add truck climbing lanes at 10 steep grades
- Add broadband communication system for improved traffic management
- Provide an open toll road system to eliminate stopping and starting at traditional toll booths



improvements to **capacity**

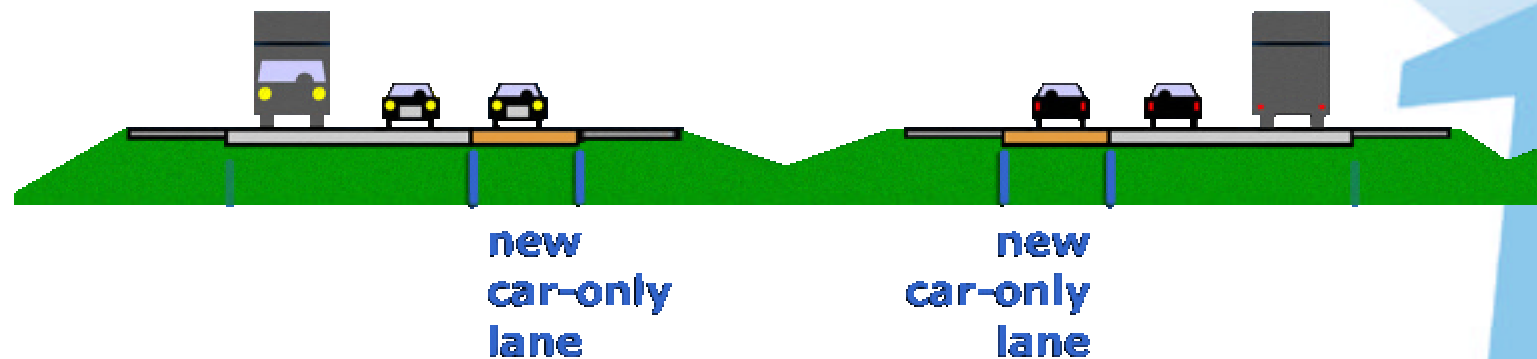
- Rebuild interchanges
- Rebuild majority of cross bridges
- Additional lanes in congested areas



cross sections

- Focused efforts to minimize ROW take
- Maintain scenic median along **55%** of the corridor

Typical Cross Section



the problem with truck lanes

Fluor studied truck lanes for a solution for I-81

- Economic driver behind Reason Foundation concept is heavier pavement for heavier trucks
- This requires agreement with adjacent states for long-haul benefits
- Added lanes do not fit within the median of I-81, which increases cost and impacts environment
- Since there is no cost savings for users, significant diversion likely
- Trucks and cars must be barrier separated to reduce accidents

our

conclusion

As compared to six lanes

- Two more lanes are prohibitively expensive
- Two more lanes are not well used, since they are committed to only trucks
- Two more lanes require more ROW, with huge disruption to the environment
- Not safer without concrete barriers
- Not financeable without state and federal subsidies

rail initiative



- Divert 500,000 trucks per year from entire I-81 corridor and facilitate future passenger rail improvements by:
 - Hauling truck trailers on rail cars
 - Removing bottleneck between Manassas and Front Royal
 - Facilitating a regional plan for long-haul freight from Louisiana to New York

truck stop and rest area improvements

Trucks off the shoulders

Reduce emissions

Boost local economy

- 1,000 new truck parking spaces will be added to the corridor at existing truck stops
- IdleAire technology promotes use of commercial parking and provides environmental benefits
- Existing rest stops will be upgraded for the traveling public



Implementation

Michael Hatchell

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relevant experience



- A majority of the design-build projects in the United States in the last 10 years have been executed by members of this team
- The I-81 project size and complexity requires expertise of this nature

Safety, Quality, On-time,
within Budget -
“Best-of-the-Best”

relevant

experience



**proven
design-build
experience**

- I-15 Corridor, Salt Lake City – \$1.3B
- San Joaquin Hills Corridor – \$802M
- Conway Bypass, Conway – \$386M
- Pocahontas Parkway, Richmond – \$330M
- E-470 Toll Road, Denver – \$323M
- PPTA Route 28 Corridor Improvement – \$200M
- I-25 Corridor, Denver – \$1.2B
- SH-130 Toll Road, Austin – \$1.2B

work plan

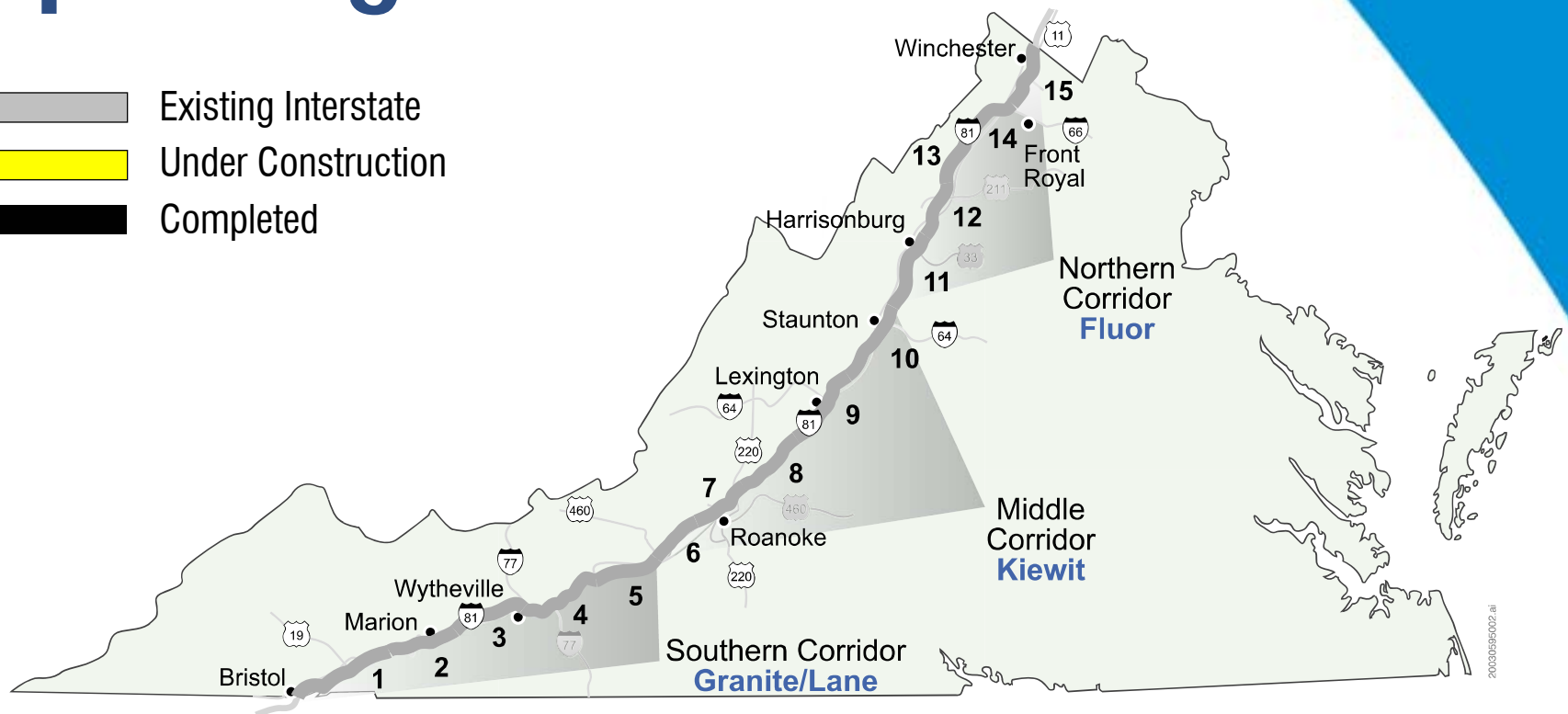


- Developed a specific approach to deliver this project
- Defined 15 20-mile segments of work with 5 segments assigned to each Design-Build Team
- Enables the construction to be contained within smaller, well planned work areas
- The approach provides:
 - Flexible construction plan
 - Control over logistics
 - Minimize disruption for public and traffic flow during construction

Enables fast-track 8-year completion

staged openings

- Existing Interstate
- Under Construction
- Completed

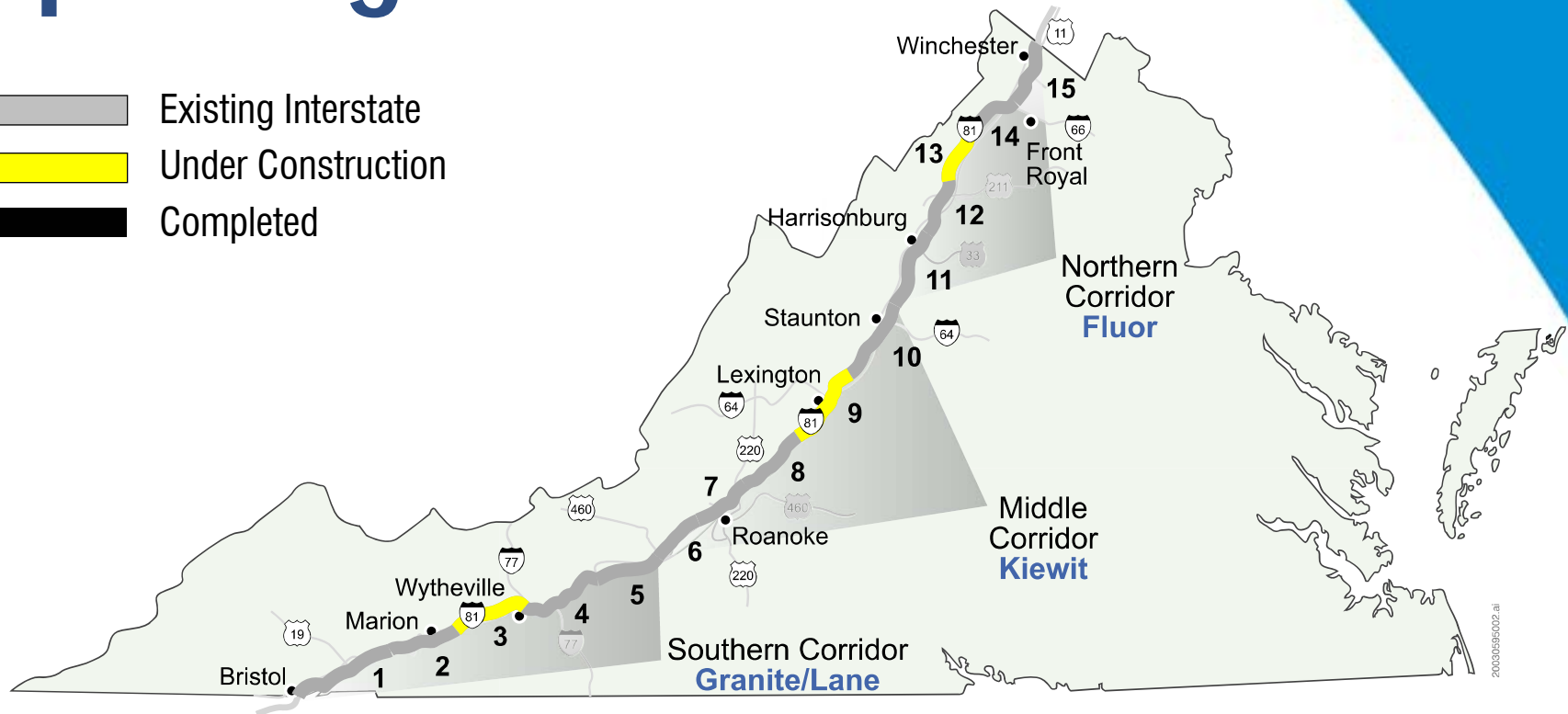


Scheduled Openings



staged openings

- Existing Interstate
- Under Construction
- Completed

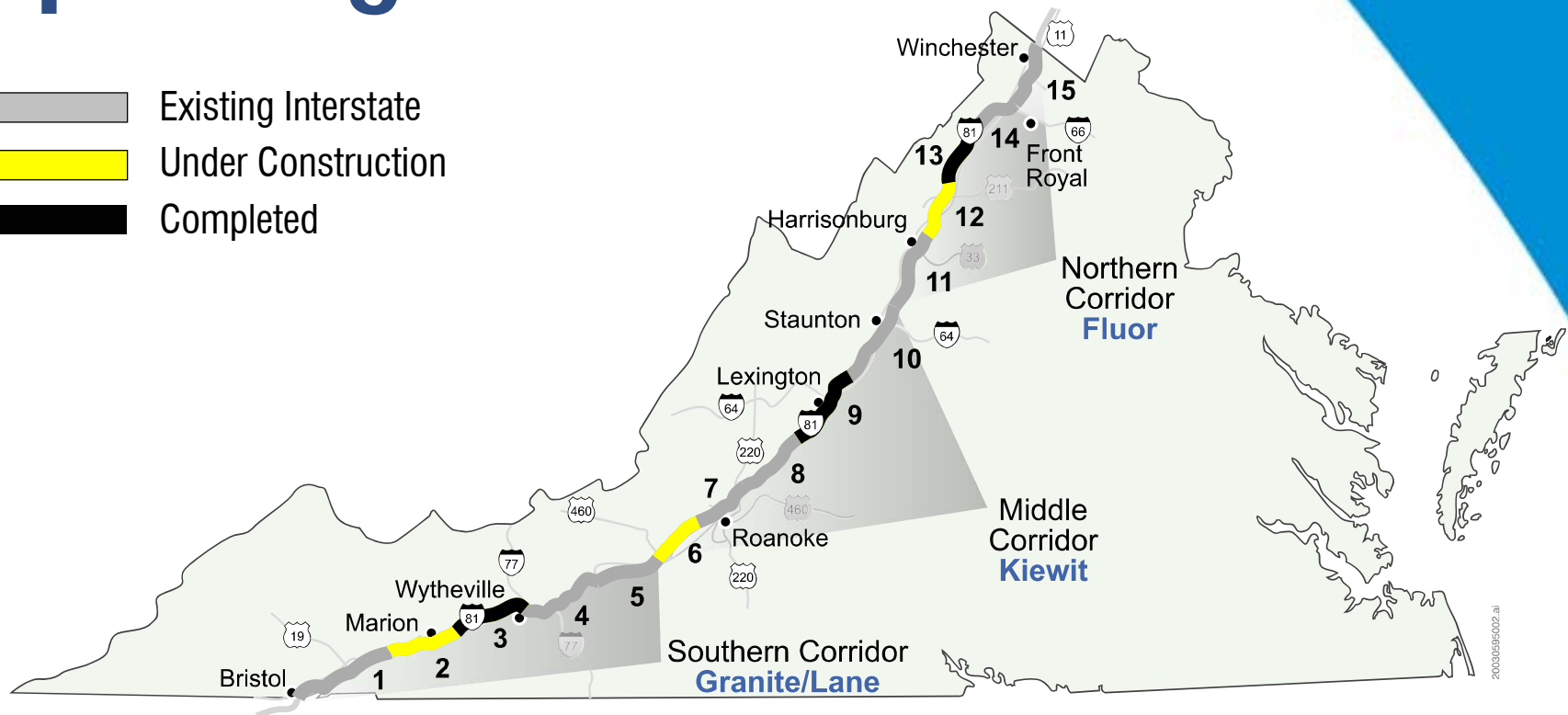


Scheduled Openings



staged openings

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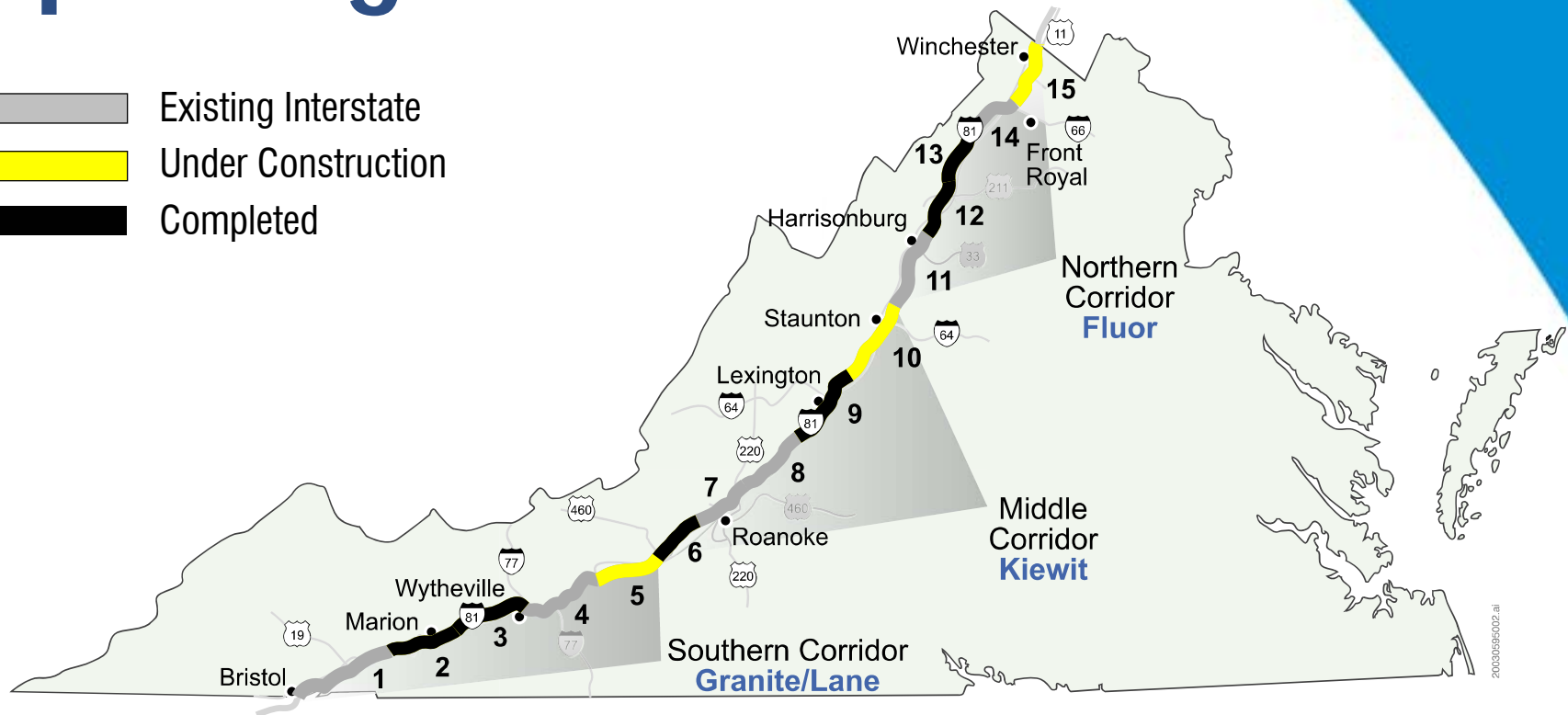


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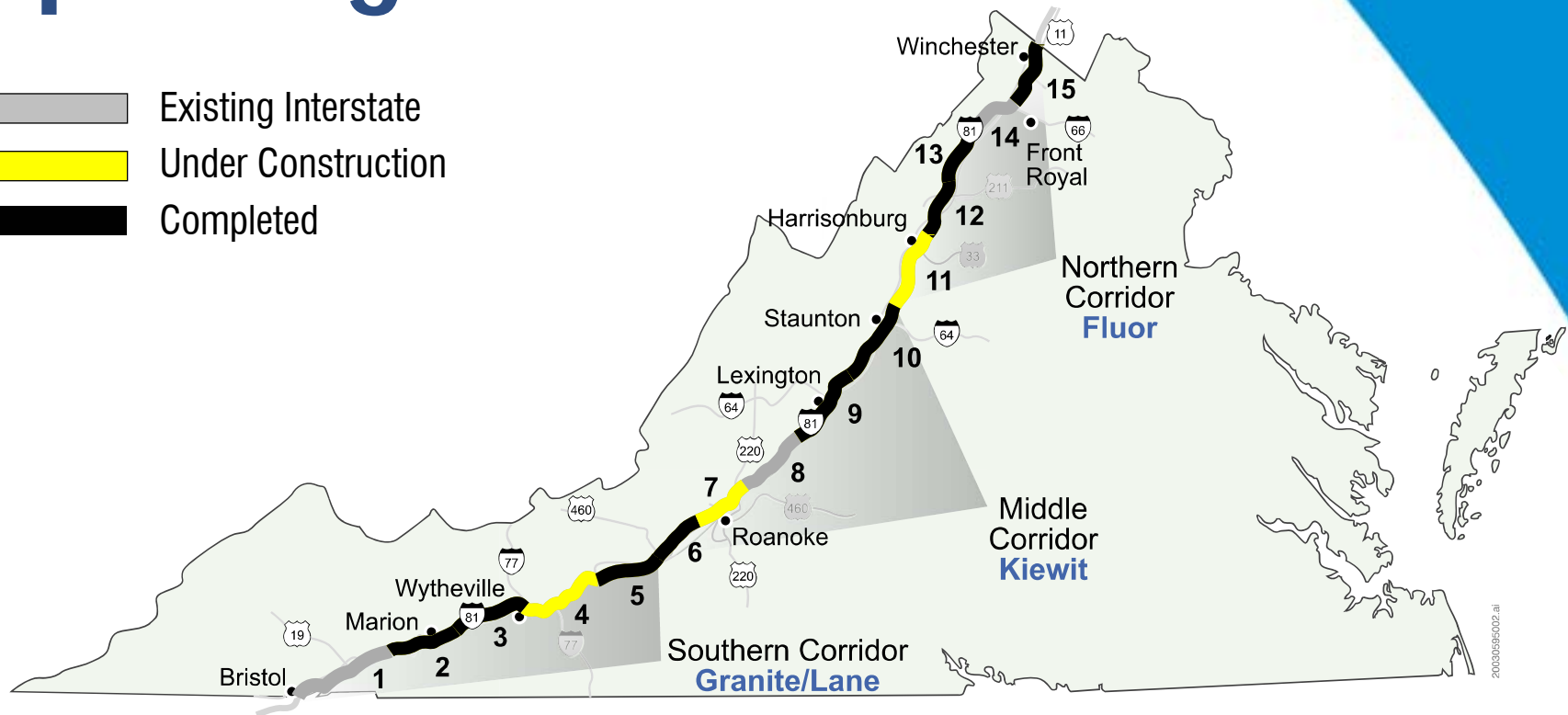


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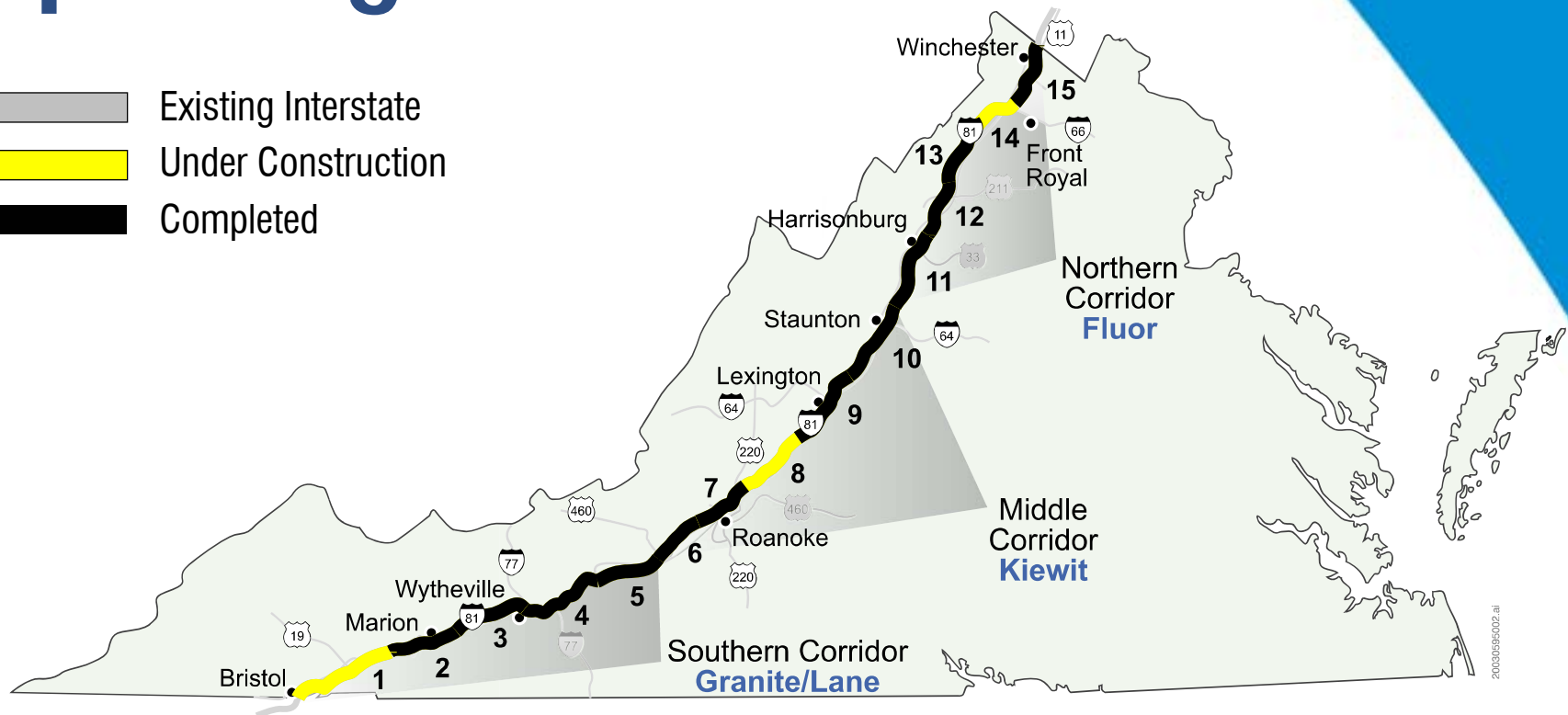


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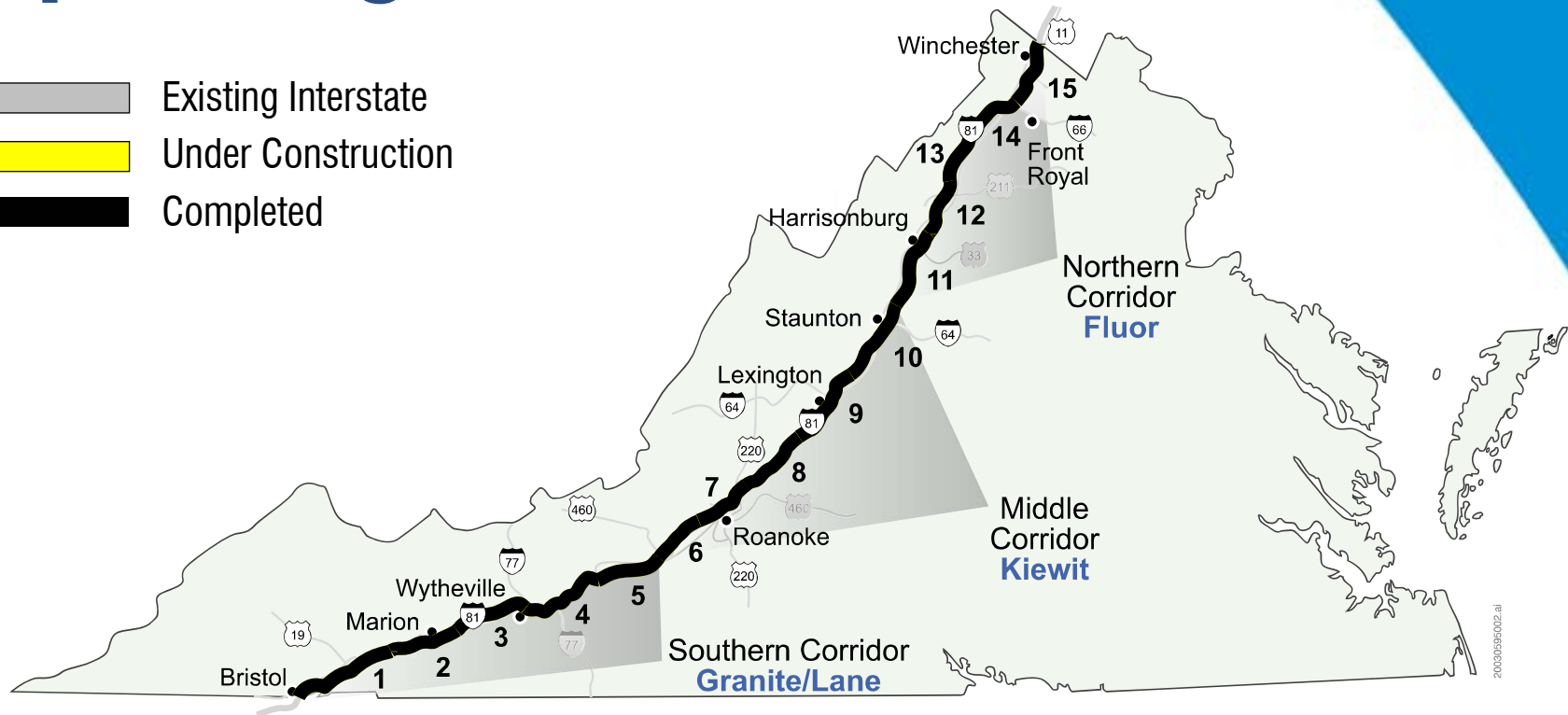


Scheduled Openings



staged openings

- Existing Interstate
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- Completed



Scheduled Openings



commitment to **public outreach**



- Fluor believes community involvement is critical for success
- Our entire plan will continue to be open to the public
- More than 100 outreach presentations given in the corridor since January 2003
- Safe81.com website has been developed to keep community informed
- We will continue to solicit communities' input and incorporate feedback into our work plan

commitment to **public outreach**

- Fluor will:
 - Continue and expand our public communications program to inform constituencies about the project, its schedule, and upcoming construction activities
 - Constituencies include:
 - ◆ Officials
 - ◆ Businesses
 - ◆ Institutions
 - ◆ Other civic leaders
 - ◆ General public



commitment to **public outreach**



- Provide real-time and current updates for the community through:
 - Radio, television, newspapers
 - Variable message signs
 - www.safe81.com
 - Meetings with public and civic groups

Finance Plan

Jim Taylor

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Fluor finance plan works



Consistent with PPTA Goals

- Expands resources available for transportation improvements
 - Approximately \$6.4 billion of toll revenue bond proceeds
 - Potential to generate more than \$3.4 billion of net revenue after debt service
 - No diversion of state or federal funding for capital costs
- Allocates development and operating risks to private sector

Fluor finance plan **works**

Well Defined and Reasonable

- Detailed cost estimates and schedule
- Full disclosure of toll revenue assumptions
- Conventional debt structure
- Toll operations paid prior to debt service
- Potential for reimbursement of VDOT maintenance expenses



Fluor finance plan works

Proposal Demonstrates Financial Feasibility

- Equitable toll strategy allocates cost among all beneficiaries
- Electronic toll collection facilitates free local use and discounts for frequent users
- Reasonable toll schedule and rates

	Cars	Trucks
Prior to January 2012	No Tolls	No Tolls
2012 and 2013	2.5 cents per mile	8.5 cents per mile
2014	5 cents per mile	17 cents per mile

- Strong credit features on initial transaction ensure market access
- Several options (TIFIA, bond insurance) for enhancing second bond issue and lower toll rates
- No reliance on future state or federal funds

Fluor finance plan works



Financing Strategy for Rail Improvements Validated

- Direct loan under Railroad Rehabilitation and Improvement Finance (RRIF) program finances initial improvements
- Framework established for development and financing of other rail initiatives

Innovative Approach to Enhancing Commercial Parking

- Proceeds from taxable project revenue bonds used to enhance and expand parking capacity
- Accelerated financing option for IdleAire Advanced Truck Stop Electrification Technology

I-81

summary

- The Fluor Plan works for the people of Virginia:
 - Puts safety first
 - Offers a practical and cost-effective solution
 - Minimizes environmental disruption
 - Rail solution removes 500,000 trucks a year from I-81
 - Assembles a team that can deliver the job
 - Achieves earliest project completion
 - Provides an equitable and deliverable finance plan
 - Not dependent on any government subsidies

questions and **answers**

